

BOOK REVIEW

1001 QUESTIONS ANSWERED ABOUT INSECTS. Alexander B. and Elsie B. Klots. Illustrated with photographs by A. B. Klots and line drawings by E. B. Klots and Su Zan N. Swain. Dodd, Mead and Company, published October 1961, 260 pp., price \$6.00.

This book is the latest addition to the Dodd, Mead natural history series. Insects are the subject, and 1001 questions answered is the format. The publishers are fortunate in their authors and illustrators, for three eminently qualified experts have produced this volume.

The chapter titles provide the topical groupings for the questions. Thirteen chapters cover thirteen broad areas: insects and their relatives; origin; classification; distribution and ecology; structures; development; senses; behavior; societies; aquatic insects; insects and plants; insects and other animals; insects and man. Material on commonly seen arachnids is included in the last chapter.

The scope of the book is extensive. The authors do not confine themselves to the groups in which they have specialized but explore the wide range of orders. The questions not only pique the interest of the reader but also give rise to answers which, in total, develop a well-rounded entomological background. Frequent references are drawn from the authors' extensive field observations. Thus, practically all areas of insect study are exposed. The tone of the answers is pleasantly conversational and scientifically accurate.

The use of a book of this kind as a reference depends, in great measure, upon the index. The authors have fulfilled this requisite; the index is full and workable with cross-references.

A. B. Klots has provided 31 black and white photographs which are grouped and inserted in the center of the book. They are representative of his photographic work, which has delighted entomologists. The line drawings are clean-drawn and exact and add to the informative quality of the answers.

No book entirely escapes its reviewer's criticisms. In this case they are very minor. A couple of times I wished for a slightly different distribution of the emphasis in answers. Also, I wonder

if it would not be more exact to have used the word "bite" instead of "sting" when describing the aquatic bugs in question 618 and the spiders in 984?

Both professional entomologists and amateurs will find the Klots' book a useful one. The professional needs to keep abreast of the large and complex insect group, and the amateur needs to be awakened to this fascinating field in natural history. Science continues to reveal new facts daily. This volume, which has collected and sorted many such facts for its readers, can be considered one of entomology's happy contributions along the way.
—J. FORBES

INSECT TRAVEL—by jet and by sea

High-speed jet aircraft has increased the transfer of insects from one country to another and the World Health Organization has found that insects which normally would be killed by long hours of exposure to cold, may survive short jet trips between countries. Documented cases show that insect eggs laid on aircraft, survived the cold at altitudes of 25,000 feet for several hours and still hatched. On a lower level, the Michigan Dept. of Agriculture has discovered nearly 30 alien pests transported there since the opening of the St. Lawrence Seaway that now brings traffic to Michigan ports from all parts of the world.

—by air

A current study being conducted under a National Science Foundation Grant by Carl J. Mitchell, seeks to determine the mode of dispersal of arthropods throughout the Pacific. Dr. Mitchell of the Bernice P. Bishop Museum at Honolulu has flown about 74,000 miles between August and December of 1961 to trap high-altitude free-soaring insects. The entomologist flies in a Constellation cruising at about 200 m.p.h., fitted with a specially designed insect trap fifteen feet long.